

LEVEL II

12

6
Test Excavations at the Gavin's Point Site, 39YK203, South Dakota, BS

AD A100543

10
Larry J. Zimmerman
Lawrence E. Bradley

11
Aug 1978

12 36

University of South Dakota Archaeology Laboratory
Contract Completion Study-76

14

Prepared for U.S. Army Corps of Engineers
Omaha District - DACW45-78-M-2952

15

DTIC
ELECTE
S JUN 24 1981 D
D

DTIC FILE COPY

DISTRIBUTION STATEMENT A

Approved for public release;
Distribution Unlimited

81 6

24 059

412 341

mt

DISTRIBUTION OF THIS
REPORT IS UNLIMITED

INTRODUCTION

The Gavin's Point Site (39YK203) was called to the attention of the staff of the W.H. Over Museum in 1960 by Mr. Charles Wetmore of Vermillion, South Dakota. At about the same time, the site was also called to the attention of the Smithsonian Institution River Basin Surveys by Ansel Peterson and George Costel of the U.S. Army Corps of Engineers. Collections were made from the site in 1961 when limited testing was conducted by W.R. Hurt, Jr., director of the W.H. Over Museum; he was aided by Robert Neuman and Robert Hall. The location of the site has been known for many years to local artifact collectors and it continues to be an area for surface collecting and 'pothunting'. Mr. Ned Hanenberger of the University of South Dakota Archaeology Laboratory, while discussing Yankton area archeological sites with local collectors and rangers from the South Dakota Department of Game, Fish, and Recreation, learned that parts of the Gavin's Point site were being destroyed by wave action. Upon inspection of the site, Hanenberger noted 1) that the surface materials covered an extensive horizontal area and 2) that several varieties of pottery were present, temporally ranging from Plains Woodland, through early Plains Village Tradition, and extending into the historic period. Hanenberger also learned, at that time, that the South Dakota Department of Game, Fish, and Recreation was planning to construct several roadways, parking lots, and a beach area at the eastern edge of the archeological site. Because cultural resources present at that location could be potentially threatened with destruction by the pending construction activities, a cultural resource survey of the area was conducted by members of the University of South Dakota Archaeology Laboratory. Upon completion of the survey, further investigations at the Gavin's Point site in the form of subsurface testing were recommended. In June 1978, the U.S. Army Corps of Engineers, Omaha District contracted with the University of South Dakota Archaeology Laboratory to conduct archeological testing of the Gavins Point site. The purpose of the testing was to determine the eligibility

of that site for nomination to the National Register of Historic Places and hence, to assess the significance of the site for enhancing our understanding of the prehistoric record of the area.

This report details the results of the test excavations conducted at the Gavin's Point site by members of the Archaeology Laboratory at the University of South Dakota. The report includes a discussion of the background of previous archeological investigations at the site, a summary of the 1978 test excavations, the results of the analysis of recovered materials, and recommendations concerning the future of the site. The 1978 tests were conducted by Dr. Larry Zimmerman, Dr. Lawrence Bradley, Mr. Ned Hanenberger, and Ms. Barbara Lass from the Archaeology Laboratory at the University of South Dakota and Ms. Audhilde Schancke, University of Tromso, Norway. The authors would like to thank Mr. Conrad Melius, Park Manager for Lewis and Clark Recreation Area and other members of his staff for their cooperation.

39YK203: Ecology

Gavins Point (Figure 1) is an elevated protrusion into Lewis and Clark Reservoir and is situated in the southwestern segment of the unflooded portion of Sec. ●, T.●N., R.●W. in Yankton County, South Dakota. This spot was to have been the location of the north end of the Gavins Point Dam, because of its position at the narrowest point of the basin of the prereservoir Missouri River. However, when geological conditions for the placement of the dam at that location proved unfavorable, the damsite was moved farther downstream.

The Gavins Point Reservoir area is located on the southern end of what has been labelled the "gorge of the Missouri" (Rothrock 1943:39) and is characterized by steep bluffs and narrow flood plains. The gorge averages about 400 feet in depth through most of the area, although near Yankton, it is little more than 300 feet in depth. The mouth of the gorge lies about 6 miles upstream from Yankton, and is called Gavins Point. Below Gavins Point, toward

DELETED

Figure 1. Map showing the placement of the 1978 test excavations at Gavins Point.

| | |
|--------------------|-------------------------------------|
| Accession For | |
| NTIS GRA&I | <input checked="" type="checkbox"/> |
| DTIC TAB | <input type="checkbox"/> |
| Unannounced | <input type="checkbox"/> |
| Justification | |
| By | |
| Distribution/ | |
| Availability Codes | |
| Dist | Avail and/or Special |
| A | |

DTIC
ELECTE
S JUN 24 1981 D
D

Yankton, the Missouri River valley widens rapidly until it joins the ancient valley of the Niobrara River which intersects the Missouri valley from the north (Rothrock 1943:39).

The course of the present Missouri River was fixed as a consequence of glacial ice blockage of eastward flowing streams, like the Grand, Moreau, and Cheyenne Rivers at the point where they formerly crossed the present Missouri Hills. Glacial drift found on terraces well down the present course of the Missouri indicate that the valley acted as a spillway for glacial melt and runoff. Gravels comprising the drift are composed of materials that were transported into the area by glacial action. From the position of these terraces and the sections of old drift, it is evident that only the lower part of the Missouri valley has been carved since the advance of the last ice sheet (Rothrock 1943:41). Later, the valley was covered by a thin mantle of windblown loess.

Gavins Point, from the air, resembles a "hook" with a small cove inside. The archeological site completely surrounds the cove and extends well up the hillsides which slope from the north in the direction of the reservoir. The cove was formed by the flooding of the mouth of an intermittent stream, which probably at one time carried water year round. The stream valley is relatively narrow with relief ranging from an elevation of approximately 1208 feet m.s.l. at present water level to 1433 feet m.s.l. at the head of the valley about 1 mile upstream. Presently the mouth of the stream is a very large marsh created by the reservoir. Cattails are the primary vegetational growth in the marsh.

The eastern side of the cove is much broader and flatter than the western side and it is the location of the Gavins Point Unit of the Lewis and Clark Recreation Area. This broad zone has been planted with various grasses and is presently kept well trimmed. A small dirt road parallels the eastern edge of the cove up to 20 meters from a cut bank about 1.5 meters in height bordering a narrow beach with a shallow deposit of sand overlying mud. Water in the cove is shal-

low in most areas but is over 2 meters deep in small holes and in the former channel of the tributary stream. The western side of the cove is considerably different from the east side; hills forming the west side of the valley terminate at water level in many areas. Bank slumpage has left a cut bank of 25 meters or more in some places. A small terrace lies about 4 meters above the open water outside the cove. This terrace, west of the cove, is no more than 40 meters wide and is deeply cut by an old dirt road that existed prior to the reservoir's construction. Along the cut bank are a few small trees, but it is apparent that larger trees once existed in the area because their stumps remain visible in the water. Several large trees have recently slumped into the reservoir to the west. Hills with well-defined peaks rise about 30 meters above this western section. Most are grass covered with occasional occurrences of yuccas, sumac, and other brushy species. Larger trees, including oak, elm, ash, cottonwood, and willow, are found in the valleys between the hills.

It would be difficult to estimate with precision what the area was like prehistorically. The area could provide considerable shelter during the winter as well as access to many wild foodstuffs during almost any season. Fish and shellfish should have been readily available to the prehistoric occupants from both the Missouri River and from the tributary stream itself. Since the valley is one of the deepest, longest, and most wooded valleys in the immediate vicinity, firewood would have been available year round, game should have been plentiful, and wild plant materials, including nuts, berries, and water plants, should have been in abundance. The mouths of streams could have been most suitable for the practice of horticulture. Here the most fertile land was usually present, valleys were wide, and water was permanently available.

All these factors provide a nearly ideal location for prehistoric habitation. Given the nature of the archeological material encountered in the vicinity of Gavins Point, the area has seen considerable human occupation and

utilization from prehistoric times into the historic period.

Prehistory of the Gavins Point Area:

The area of the Missouri River valley between Sioux City, Iowa, and Pickstown, South Dakota, is very poorly known from an archeological perspective. In spite of the fact that the Gavins Point Dam was one of the earliest to be constructed on the Middle Missouri drainage (1955), archeological attention was primarily focused upstream. Consequently, few sites are reported from the Gavins Point area. Yet, topographically, climatically, and culturally the river marks a boundary between the Central Plains to the south and the Middle Missouri to the north. The area has been one of considerable occupation by both modern and aboriginal populations. Cultural events important to both the Central Plains and the Middle Missouri have occurred in the area. The zone seems to have been an area of heavy occupation by Plains Woodland peoples. Early Plains Village populations of various cultures are represented in the archeological record of the area. The stretch of river from the mouth of the Niobrara River to Pickstown probably represents the first area of contact between the native Initial Middle Missouri variant peoples and the incoming Central Plains tradition peoples from the south. Historically, the area was heavily occupied by the Yankton Dakota. In short the area has been one of intensive human utilization and occupation beginning in prehistoric times. As well, it has been a zone of cultural transition for cultures undergoing change, and for groups adapting to new natural environments or to each other.

Brief descriptions of archeological investigations done in the Gavins Point area appear as early as 1919 in the field notes of W.H. Over (Sigstad and Sigstad 1973). Over's work focuses primarily on burial mounds including both historic (25KX207) in Nebraska and Plains Woodland at the Yankton Mounds Site (39YK1). This orientation was continued as the staff from the University of Nebraska tested the Larson Deep Site (25KX7) and the Larson Mounds Site

(25KX8) in 1937. Both these sites were identified as Plains Woodland. In 1951, the Missouri Basin Project conducted an archeological survey in the proposed pool of the Gavins Point Reservoir (Fenenga 1953). Five sites were located at that time, these included the two sites formerly investigated by the University of Nebraska. Robert Neuman of the Smithsonian Missouri Basin Project tested 25KX15, a deep lithic site with points similar to those found in the Angostura and Big Bend Reservoirs. A Plains Woodland site near 25KX15, 25KX201, was also tested. During 1961 Robert Hall of the W.H. Over Museum of the University of South Dakota tested the Gavin's Point Site (39YK203). In that same year, Wesley Hurt Jr., directed excavations of the Tabor Site just south of Tabor, South Dakota on the north shore of the reservoir. The most recent surveys of Lewis and Clark Lake were conducted during the summers of 1963 and 1964, when Howard and Gant (1966) of the W.H. Over Museum conducted a reconnaissance of the cut terraces in the area. The primary concern at that time was to locate sites which were eroding away due to wave action by the newly formed lake. Twenty-one new sites were located at that time in addition to the five reported earlier by the Missouri Basin party. In 1964 more intensive work was completed on five sites in the reservoir area, all of which were in Nebraska.

That the Gavins Point area was occupied by Paleo-Indians during the latter stages of the Pleistocene has not been substantiated. No evidence has been found of Clovis mammoth hunters; the rare exceptions have been surface finds of Clovis projectile points. Plano projectile points associated with the hunting of extinct species of bison are known from the area as evidenced by the Angostura-like points from the Larson Deep Site on the Nebraska side. The 1976 finds of large numbers of bison skeletal remains immediately downstream from the Gavins Point Dam indicate that large herd animals were plentiful in the area. These bison have been tentatively identified on the basis of horn core size and spread as Bison occidentalis (Semken, personal communication). While no human remains or

cultural materials have been associated with this species of bison, occidentalis is known to have been at least partially contemporaneous with human occupation in the Plains. Given that the Paleo-Indian tradition populations were small and pursued a nomadic way of life, few sites are to be expected in the area.

With the diminution of large herd animals near the end of the Pleistocene, the big game hunting mode of subsistence shifted toward a more generalized hunting and gathering pattern of the Foraging or Prairie Archaic tradition. Few of these sites are known from the immediate area. However, one major site of this time period is the Tramp Deep Site, 25KX204, on the Nebraska side of the reservoir. The Archaic cultural level was noted at a depth of 15.5 to 18 feet, and has been dated at 2,960 radiocarbon years \pm 125 years. The Archaic of the area is better known from the Cherokee Sewer Site (13CK405) about 100 miles to the east and at several other sites downstream in both Nebraska and Iowa (Shuttler, et al 1974; Anderson, et al 1976).

Probably the best known cultural tradition in the Gavins Point area is Plains Woodland which begins about 700 B.C. represented in the upper components of Tramp Deep. Woodland peoples at that time still practiced the generalized hunting and gathering subsistence pattern characteristic of the Archaic, but population levels had increased and occupations were becoming more sedentary with people often occupying and utilizing only a single drainage system. Nine of the 21 sites reported in the Lewis and Clark Reservoir area by Howard and Gant (1966) had definite Woodland affiliations.

Influence from the Southwest, starting about A.D. 900, caused a series of changes in the lifeways of Plains Woodland groups living along the Missouri River in South Dakota. Perhaps the greatest of these changes involved the modification of the subsistence base. The Woodland peoples primarily engaged in.

hunting and gathering, but with the input of newly domesticated plants such as corn, beans and squash, they became farmers. With the advent of farming came increases in sedentism and larger population size. Several different cultural groups developed throughout the eastern Plains region. While these groups were similar in many respects, they exhibited specific cultural variations in terms of their lodge structures, ceramics, stone tools, and other technological developments. The Initial Middle Missouri populations appear to have developed in northwest Iowa and southwest Minnesota. These groups include the Mill Creek and Great Oasis cultures along the Little and Big Sioux Rivers. Gradually these groups moved west and established large villages along the James River tributaries and eventually reached the Missouri River. Central Plains tradition peoples developed in the southeast as Caddoan peoples and later pushed into Oklahoma, Kansas, and Nebraska. Drought during the 12th and 13th centuries pushed these peoples out of the Central Plains; groups moving north came into contact with the Middle Missouri peoples and a blending of cultures began the formation of the Coalescent tradition. These groups dominated the Missouri valley until the intrusion of the Siouan speaking groups and the Europeans.

The general area of the Missouri valley between Nebraska and South Dakota has thus been an area of cultural transition with groups adapting to both the changing environments of the Great Plains and to other groups already living in the region. This cultural mosaic is apparent at the Gavin's Point Site.

Prior Investigations at 39YK203:

As part of a project to investigate Woodland and related early occupations in the area of Gavins Point and in the Ft. Randall Reservoir, a party from the W.H. Over Museum undertook test excavations at several sites, including 39YK203. In the early 1960's, the Gavins Point site had been called to the attention of the W.H. Over Museum by Charles Wetmore of Vermillion, and, in the same year it was independently recognized and called to the attention of the Smithsonian Institution

River Basin Surveys. Under the direction of W.H. Hurt, Jr., R.W. Neuman, and Robert Hall tests of the site were conducted.

Archeological remains were extensive at the site; they included several types of cord-marked pottery, an assortment of chipped and ground stone tools, worked catlinite, historic trade materials, and metal implements of Indian manufacture (Hall 1961:1). While the historic materials were found to be localized to the eastern extremity of the site, all prehistoric materials were spread along approximately 1,500 feet of beach, in roadside ditches, and in cultivated areas. Human burials were noted in the hills overlooking the habitation area. Hall noted fragments of bison bone on the surface of the site which he could not definitely relate to habitation at the site. No house depressions were visible on the ground surface, but lumps of fired clay bearing stick and grass impressions which could have been produced as a result of housebuilding activities, were found. Portions of two storage pits were identified on the mud flats during low water, but no evidence of hearths or other pits was found.

A minimum of two cultural horizons were interpreted from surface materials. The most recent remains were identified as historic, possibly Yankton Sioux, and contained blue and white pony glass beads, flintlock gun parts, brass kettle fragments, worked catlinite, broken files, metal arrowheads of several varieties, shot sieves, and other miscellaneous items of European origin. The earlier horizon contained several types of chipped stone tools and ceramics with cord roughened exteriors with various forms of rim decoration.

The earlier ceramic group was identified as Plains Woodland (Hall 1961:2). Pottery was found which resembled Valley Cord Roughened specimens from Nebraska (Kivett 1949), cord impressed types from South Dakota (Hurt 1952: Fig. XV), and Great Oasis from adjacent states. Ceramics of the Central Plains tradition were also noted in collections from the site and were thought to be from the

St. Helena phase materials from northeastern Nebraska, about 35 miles away.

The objective of the 1961 excavations was to find segregated occurrences of pottery and stone tools. The surface materials indicated several components, but precise limits of each could not be delineated. Test excavations were placed in three widely separated parts of the site but produced no natural stratigraphic sequence and few artifacts. A total of five storage pits were located and excavated in the mud flats. One rim sherd was found in each of three of these, two of which resemble St. Helena materials. The other rim resembles Great Oasis types. Sherds, constituting a restorable section of a Great Oasis vessel, were also found in an area of broken rock on the mud flats; this area probably marked the location of a seventh cache pit. The seventh pit was the only feature of its kind which was located away from the beach area, and it was discovered with the aid of a jeep trenching machine. The ditching machine was used to excavate over 700 feet of trench in six areas of the site; this was done to determine the depth of humus formation and to establish the presence of cultural refuse. The seventh pit was intersected by a linear area of deeper humus which may have been a former erosional channel. The channel contained scattered sherds and worked quartzite similar to that in the pit fill.

Hall concluded from the 1961 tests that occupation of the site was not sufficiently localized nor was the refuse sufficiently concentrated to justify additional excavations (Hall 1961:3). The segregation of pottery and artifacts found associated in the storage pits was deemed insufficient to definitely separate the several cultures complexes, but did not negate the conclusion that Plains Woodland, Great Oasis, and Central Plains materials were traceable to different periods of habitation at the site (Hall 1961:3). Trained Great Oasis sherds were localized in several cases in association with an unclassified, smooth-finished, grit-tempered ware, sandstone shaft smoothers, and chipped knives of Bijou Hills quartzite.

Hall's work presents several basic problems. For example, he did not test the western margin of the site where local collectors have recently found large quantities of artifacts. This area of the site is at least 6 to 8 meters in elevation above the eastern segment and is flatter than any other part of the site thus constituting a likely candidate for the location of a permanent structure during prehistoric occupation. A fairly large depression was apparent on the surface; it resembled a depression left by a collapsed earth-lodge. Finally, and perhaps most important, it is obvious from Hall's report that he was working under the assumption that Great Oasis, Central Plains, and Plains Woodland were distinct cultural and temporal entities at the site. While the precise relationships of the three complexes is not presently clear, recent evidence has indicated that Great Oasis may well have developed directly out of a Plains Woodland base. For this reason, it is entirely possible that major spatial or temporal distinctions between the two cultural manifestations are not present at Gavins Point. The site would appear to have considerable potential for the solution of questions concerning the "genetic" relationships between Great Oasis and Plains Woodland. Great Oasis materials have been found in Central Plains tradition sites in southwest Iowa (Anderson, 1971 Ms.). While St. Helena materials are somewhat later in time, we do not yet know the early temporal boundaries it has for the termination of Great Oasis. In short, the Gavin's Point site has the potential of answering some extremely important questions concerning the development of the Plains Village tradition on the eastern Plains border.

Excavation Procedures (1978):

Subsurface testing of the east side of the cove and on Gavins Point proper was conducted during 1978. East of the cove, two adjacent 2 meter squares on the edge of the cutbank and a single 1 meter square 30 meter upslope to the northeast were excavated to depths of up to 1.20 meters below ground surface. On Gavins

Point, a trench 17 meters long and 50 centimeters in width, a single 2 meter square, and 8 auger holes were excavated. All three kinds of exploratory units were excavated to depths of up to 1.25 meters.

In each of the two areas of the site, shovel scraping was the general excavation procedure employed; trowels and smaller implements were utilized for the removal of smaller items from the matrix. Generally, 10 centimeter levels were employed for vertical control and as collection units for cultural remains. Samples of fill were dry screened through one-fourth inch mesh during testing of the east area, but the technique was abandoned when the return was found to be minimal in that area.

ANALYSIS OF MATERIALS

Classificatory techniques utilized in the analysis of materials from the Gavins Point site follow the traditional categories of Stratigraphy, Lithics, Ceramics, and Faunal Remains. The utilization of a descriptive framework for the cultural remains recovered from the site stems largely from the small samples of materials recovered from excavations.

Stratigraphy

Two 2 meter squares, intersecting the cutbank east of the cove, were excavated to a depth of 1.15 meters below the immediate ground surface. Cultural remains recovered from the two units were minimal and were nowhere found to be concentrated. The matrix consists of a dark brown sandy loam which only slightly grades into yellower shades near the lower limits of excavations. A more complex stratigraphic sequence was encountered southwest of the cove on Gavins Point proper. The trench profile (Figure 2) reveals a series of distinct stratigraphic units.

Unit I is most extensive at the southern end of the exploratory trench and was encountered as a thin, discontinuous layer extending over much of the ground surface of the excavated area. Cultural remains recovered from this unit consist of recent metal objects datable to the last few decades. The color of the unit

is yellow and resembles the exposed loess that is upslope from the tests; it is assumed to represent the origin of the material in Unit I. The depth of the unit varies from barely negligible in the north end of the trench to 30 centimeters at the south end.

Unit II is the most extensive stratum encountered during excavation of either the trench, the 2 meter square, or the bank edge of Gavins Point. The upper and lower surfaces of the layer follow the ground surface contours and become only slightly thicker toward the south. It was within this unit and Unit IV that all prehistoric cultural remains from the trench were encountered. The fill comprising this unit resembles, in both color and texture, the matrix encountered during testing east of the cove. This unit was nearly 1 meter in thickness in the southern half of the trench.

Unit III consists of yellow substratum devoid of cultural materials. The unit appears to be loess and resembles that of the exposed surface of a roadway northwest of the trench. An abrupt contact is present between Units II and III at a depth of from 46 centimeters to 1.06 meters from the surface.

Unit IV consists of a shallow basin-shaped pit probably originating in Unit II and extending into Unit III. The bottom of this feature sloped slightly to the south. Maximum horizontal dimensions are 50 centimeters in diameter and are generally centered in the trench. Fill of the pit consisted of a matrix similar to that of Unit II; cultural remains were concentrated in the feature and slightly above it.

Unit V consisted of an ash lens up to 25 centimeters in thickness which was encountered in only the northernmost part of the trench. No cultural remains were encountered in the ash, but bone was removed from the surface of the material.

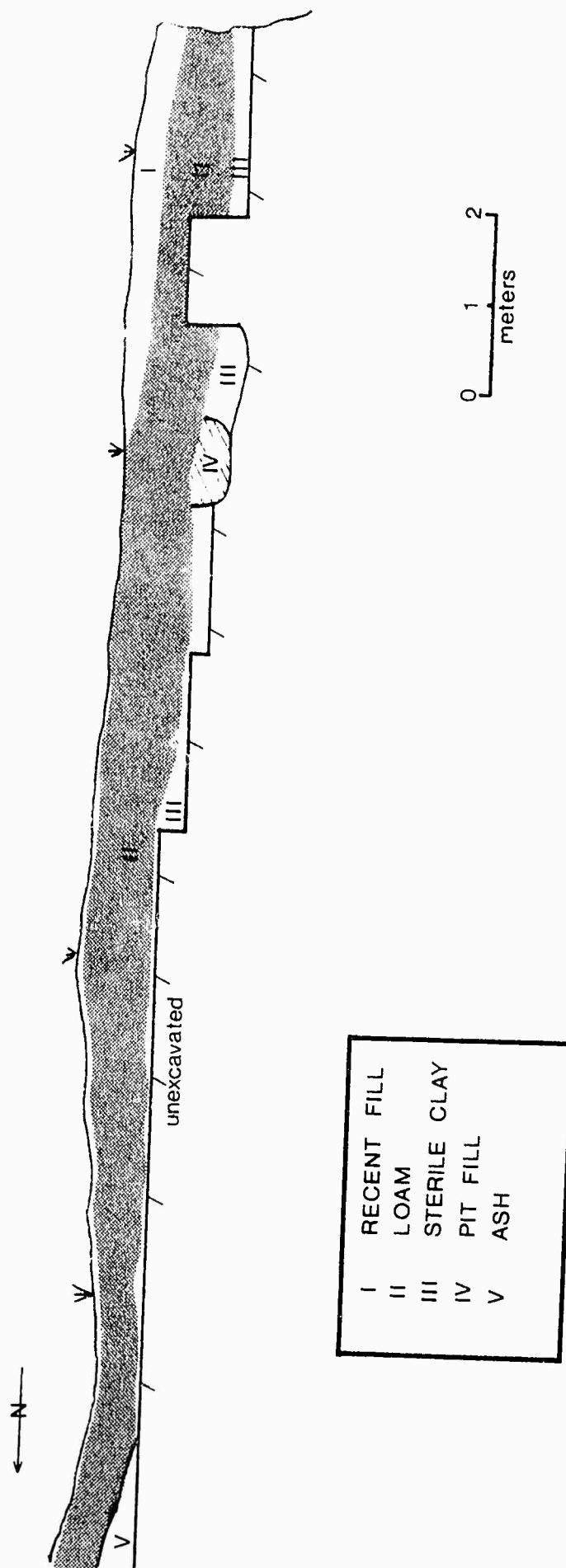
Chipped Stone Tools

Sample Size: 19 specimens including 12 surface finds.

Lithic raw materials utilized for the manufacture of retouched tools from 39YK203 are predominately divided into quartzite/non-quartzite categories. Each

Figure 2. Profile of east wall of trench excavated at Gavins Point.

39YK203 TRENCH PROFILE



of the two basic raw material types correlates with specimen category size; this phenomenon has been noted and described previously for the northern Plains (Ahler 1977).

End scrapers and smaller specimens, such as the projectile points in the sample, are consistently manufactured from finer grained materials such as cherts and chalcedony; larger tools, such as retouched flakes and bifaces are, with few exceptions, manufactured from quartzite. Further, the thinner, marginally retouched specimens are Bijou Hills Quartzite, while thicker and heavier bifacial specimens are of a wider range of colors and textures of quartzite. It is possible that the differences in raw material noted for the small sample of lithics from 39YK203 represents the predictability of the raw material in terms of the intended function of the finished tool or perhaps wearing characteristics of the working edge of the tool.

End Scrapers (6 specimens):

Specimens identified as end scrapers include four 'thumbnail' scrapers (Figure 3 a,b,c,d), one carinated specimen (Figure 3e), and a single broad, flat scraper (Figure 3f). Of the specimens illustrated in Figure 3 a,b, and c are surface finds. The carinated and flat scrapers were removed from the lowest levels of the trench.

End scraper dimensions in millimeters are as follows.

| Length | Width | Thickness | Edge Angle (degrees) |
|------------------|-------|-----------|-------------------------|
| 22 | 14 | 6 | 58 |
| 23 | 17 | 5 | 57 |
| 16 | 16 | 6 | 65 |
| 17 | 16 | 5 | 57 |
| round specimens: | | | |
| 23 | 24 | 6 | 62 |
| 25 | 26 | 14 | 71 |

Marginally-Retouched Flakes (five specimens)

All but one of the marginally retouched flakes recovered from the site are Bijou Hills quartzite; the single exception is of red brown chert. Most of the specimens exhibit shallow regular modification extending over one complete margin (Figure 3 i through k). Two of the tools, including the chert specimen, exhibit re-touch over the majority of their margins. These specimens are among the largest unifacial tools recovered from the site. The mean angle is 48° , suggesting that they probably functioned as cutting tools. Their size suggests that they were probably not hafted, as would have been the case with smaller tools from the site, such as end scrapers. Although the sample size for this category of artifacts is small, the lack of variability in raw material selection, dimensions, and edge angles does suggest the possibility of functional specialization.

Dimensions of retouched flakes in millimeters from 39YK203 are as follows.

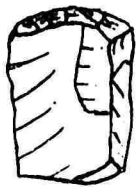
| ----- | | | |
|--------|-------|-----------|--------------------------|
| Length | Width | Thickness | Edge Angle* (degrees) |
| 66 | 35 | 7 | 42 |
| 61 | 35 | 6 | 54 |
| 74 | 56 | 7 | 51 |
| 52 | 43 | 12 | 50 |
| 55 | 28 | 7 | 48 |

*taken at three points on the margin and averaged.

Ovate Bifaces (Six specimens, including four surface finds)

This class of lithic materials exhibits more variability in specimen size and raw material selection than does any other lithic category from the site. All but a single specimen are quartzite with varying degrees of fineness of grain and are rough ovoid forms. A single specimen is Bijou Hills quartzite. Sizes of complete specimens range from 98 to 47 millimeters in length, from 74 to 29 millimeters in width, and from 33 to 12 millimeters in thickness.

Figure 3. Chipped stone artifacts from the Gavins Point site (full size).



a



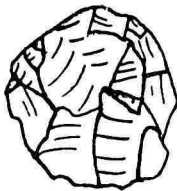
b



c



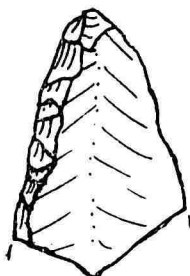
d



e



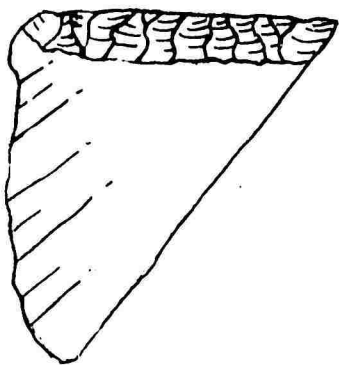
f



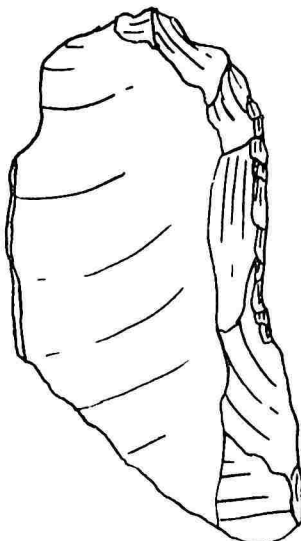
g



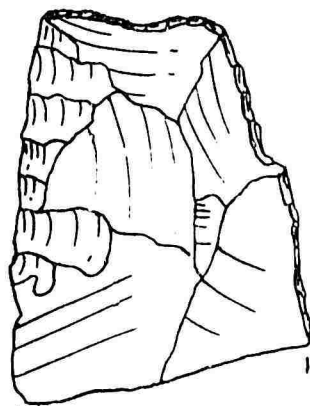
h



i



j



k

Projectile Points (Two specimens, including one surface find)

Only two projectile point fragments were recovered from the site. Both are made of chert. The first specimen is the tip of a small point which is 16 millimeters in width. No evidence of the hafting element is present. The second specimen is a side notched point lacking the top (Figure 3h). Little can be said of the two fragments other than the fact that neither can be considered as uncharacteristic of the occupations at the site.

Ceramics:

Ceramic artifacts from 39YK203 are unusually varied due to the presence of at least three prehistoric cultural components. Each rim sherd from the site is described below and is keyed to the illustrations in Appendix A. Thirteen rims were recovered from the site; four rims were recovered from the excavations and none were collected from the surface.

Plains Woodland Types

Specimen 1 (Figure 4a) is a large segment of a Woodland vessel. This sherd was found in the water near the east side of the Gavins Point cove. The vessel was evidently manufactured using the paddle and anvil technique with the bare hand used as the anvil. No impressions of fingers are visible on the interior of the vessel due to smoothing, and brushing or rubbing of the interior surface is evident from striations in places. The vessel is tempered with angular grit which gives it a rough texture. The color of the sherd ranges from gray to reddish brown; the amount of color change due to soaking in the lake is unknown. The exterior of the vessel is cord roughened and the cord runs horizontally around the vessel. The cord is of fine grade and averages less than 1 millimeter thickness and has an average of five twists to the centimeter. Cordmarks run diagonally just under the lip of the rim. The lip of the rim is somewhat flattened and has been roughened. The rim is 7.8 millimeters thick on the average and the body is 6.7 millimeters thick. The projected rim orifice diameter is 17.6 centimeters.

The body of the vessel was elongated with a conoidal base, and it swelled slightly about midway down the body to an estimated diameter of 23 to 25 centimeters. This sherd compares well with the descriptions given for Feye Cord Impressed (Kivett 1952:54) or Valley Cord Roughened (Kivett 1949:68); the exception was the primarily horizontal orientation of the cord on the specimen from Gavins Point.

Specimen 2 (Figure 4b) fits the classic description of Scalp Punctated (Hurt 1952:66-67). The method of manufacture of the vessel was probably paddle and anvil with the bare hand used as the anvil on the interior. Temper is angular grit, which gives the vessel a rough texture. Color is dark gray on the exterior and light gray on the interior. The exterior of the vessel shows over-all cord roughening with fine parallel cordmarks horizontally around the vessel. The cords average 1.8 millimeters thickness and have six twists to the centimeter. Specimen 2 has two bosses raised on the exterior of the vessel as a result of punctates on the interior. Each punctate is 5 millimeters in diameter and the two punctates are 6.8 millimeters apart. The sherd is 8 millimeters in overall thickness. The rim is flattened on the lip, but some cord impressions on the lip have been smoothed over. No estimates of overall size are possible.

Specimen 3 (Figure 4c) is another Scalp Punctated rim which follows the same general description as specimen 2. The sherd is gray on the interior but red on the outside. Only one boss shows on the surface but the breakage of the sherd is such that another interior punctate shows; these are 9 millimeters apart. The diameter of the punctates is 5 millimeters. The lip of the rim is much flatter and smoother than that of specimen 2 and no cord impressions show. The lip is slightly extruding. The overall vessel thickness is 9.5 millimeters.

Plains Village Types

Specimen 4 (Figure 5a) is a Great Oasis Incised rim (Williams 1975). This specimen has a flat, slightly extruding lip with a thickness at the lip of 6 millimeters. A band of eight lines encircles the rim. Three parallel incisions


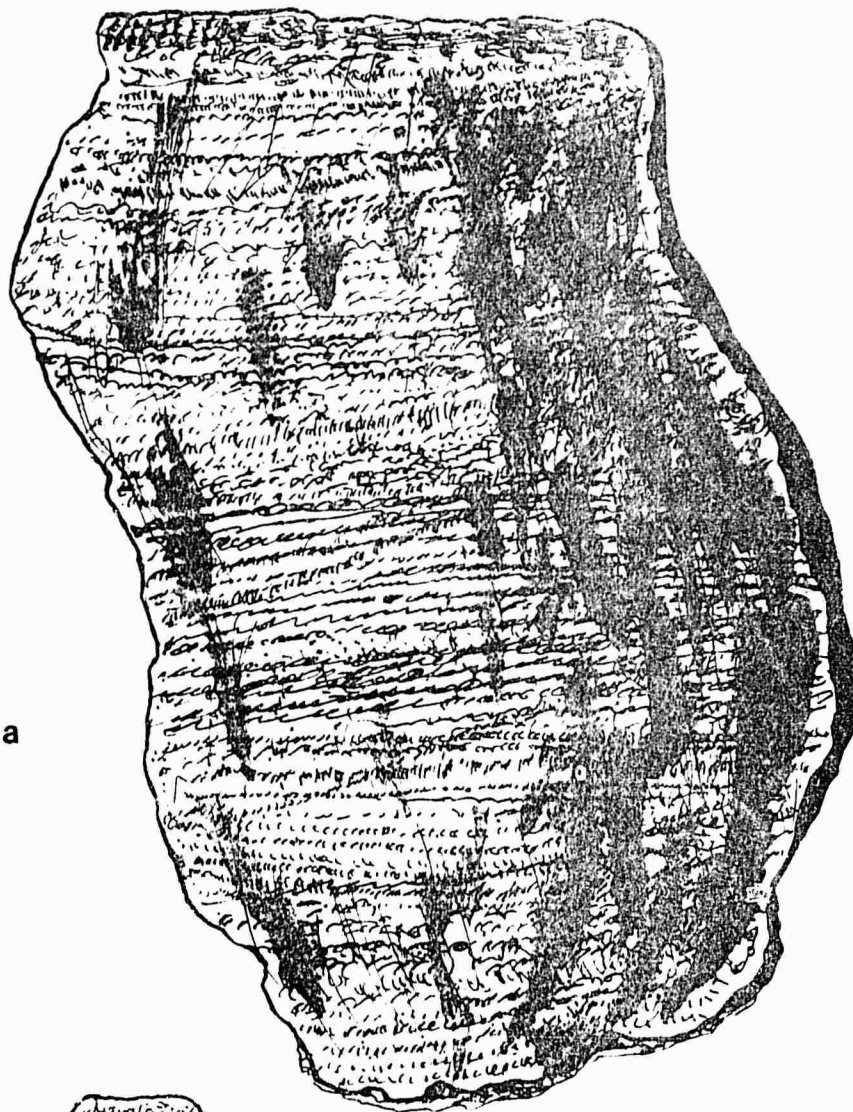


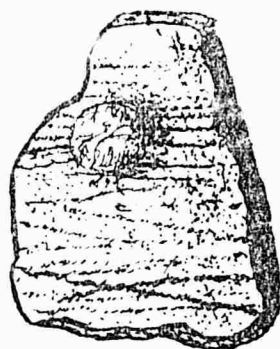
Figure 4. Woodland rim sherds from the Gavins Point site (actual size).



a



b



c

form a probable zig-zag motif across this horizontal field. The inside of the rim is smooth with a light gray to buff color. The texture of the vessel is rough with small angular pieces of grit temper visible on the surface. The exterior of the vessel appears to have carbonized material on it. Average rim thickness below the lip is 7.3 millimeters. The rim is 27.5 millimeters above the shoulder.

Specimen 5 (Figure 5b) is another Great Oasis Incised rim. The rim appears to be slightly outflaring and is 27.6 millimeters high above the shoulder of the vessel. The lip is very flat and has small "tick" marks along its exterior edge. Below these marks is a band of at least 11 parallel, horizontal incised lines that encircle the vessel. Ten millimeters below the lip are a series of zig-zag incisions. These are comprised of two parallel lines that transverse a 7.4 millimeter field obliquely. The sherd is grit tempered and is buff in color with a 6.7 millimeter average thickness.

Specimen 6 (Figure 5c) is another Great Oasis Incised rim. The rim is outflaring but is generally thinner than specimens 4 and 5 and has an overall thickness of 5.3 millimeters. The rim rises 20.4 millimeters above the shoulder of the vessel. The lip is not as flat as specimens 4 and 5 and has a different design with a band of only three parallel, horizontal lines encircling the rim 3.2 millimeters below the lip. From the bottom line is a pendant triangle with the point 14 millimeters from the lip and filled with at least 4 oblique lines. The interior of the vessel is rough from grit temper and is buff to black near the lip in color. The exterior of the vessel is black and has a heavy coating of carbonized material. Some typological difficulties with this sherd could be possible. Howard and Gant (1966: Plate 32B) picture a similar sherd and label it Mitchell Incised Shoulder.

Specimen 7 (Figure 5d) is a high outflaring rim rising 35.7 millimeters above the shoulder. In profile the lip comes almost to a point. Below the lip are a

Figure 5. Great Oasis rim sherds from the Gavins Point site (actual size).



a



b



c



d

series of oblique incisions, averaging 5.2 millimeters in length, in a band 4.3 millimeters wide. Below this band is a series of horizontal, parallel incised lines, 17 in number, down to the shoulder of the vessel. A pair of parallel lines zig-zags back and forth obliquely across the horizontal lines. Thickness at the shoulder is 9 millimeters and tapers to a point at the lip. The sherd is grit-tempered, buff on the exterior and black to gray on the interior. This specimen is reminiscent of Chamberlain Ware (Ives 1962), but resembles sherds labelled Great Oasis by Howard and Gant (1966).

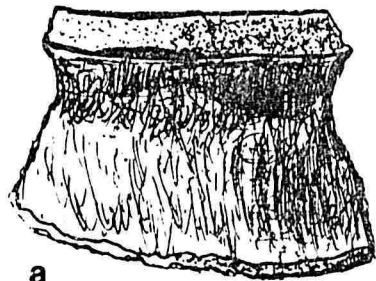
Specimen 8 (Figure 6a) is an outflaring rim, probably on a globular body. The rim generally fits the classification of Maxon Flared as described by Howard and Gant (1966:49-50) and found by them at 39YK203. The rim rises 14.9 millimeters above the shoulder and the lip overhangs the rim by 4.7 millimeters. The vessel is grit tempered and is gray on the interior and on the exterior. The rim is 6 millimeters thick.

Specimen 9 (Figure 6b) is an extremely small fragment of a Maxon Flared rim very much like the rim pictured by Howard and Gant (1966: Plate 32H). The rim is outflaring and quite short, rising only 11 millimeters above the shoulder. The rim is brown to buff on the exterior and the interior is exfoliated, so no estimate of color or thickness has been made.

Specimen 10 (Figure 6c) is a small, straight rim fragment with a flat lip. The lip has indentations on the exterior. The rim also has two broad-trailed incisions 4.7 millimeters and 10 millimeters below the lip, parallel to each other and to the lip. Color of the specimen is gray and thickness is 6 millimeters.

Specimen 11 (Figure 6d) is another rim that could perhaps be classified as Maxon Flared but the rim is small and broken off just below the lip. The rim is plain with an extruding lip, and the lip is very flat on the top. The color of the specimen is buff. The vessel is grit tempered.

Figure 6. Rim sherds from the Gavins Point site (actual size).



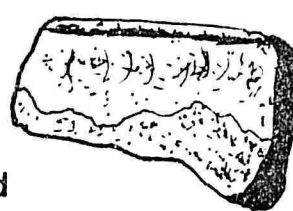
a



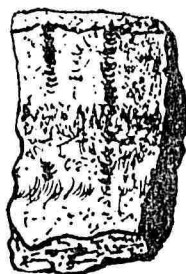
b



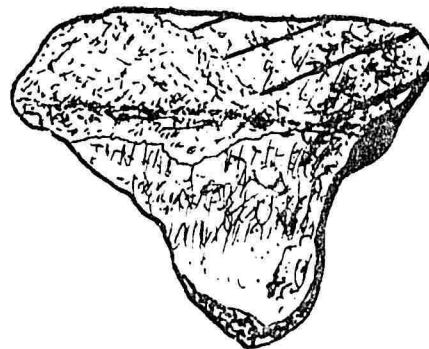
c



d



e



f

Specimen 12 (Figure 6e) is an outflaring rim with a flattened lip. The exterior is marked with what appears to be two or more single vertical cord impressions that have been smoothed over. These broken by a band of unmarked or smoothed areas and then appear to continue down the vessel. Height of the rim above the shoulder is 25.5 millimeters. The thickness ranges from 9.2 millimeters at the shoulder to 4.2 millimeters at the lip. The sherd is grit tempered and light gray in color.

Specimen 13 (Figure 6f) is a collared or wedge-lip rim. Much of the exterior has been broken off but the remaining segment has deep oblique incisions running from the lip to the edge of the collar. The vessel is grit tempered and is gray to buff in color.

Body Sherds

Body sherds from the Gavins Point Site are as varied in surface treatment as the rim sherds. The following table lists the body sherds by surface treatment.

39YK203 BODY SHERDS Collected from Surface

| | |
|---|------|
| Plain - (thin) | - 28 |
| Smoothed - over cord (thin) | - 18 |
| Cord Impressed - (thin) | - 3 |
| Simple Stamped - (thin) | - 3 |
| Smoothed-over cord - (thick) | - 5 |
| Cord-Impressed - (thick) | - 12 |
| Cord with Incisions or Trailing - (thick) | - 5 |
| Single Cord Impressed | - 1 |
| Total | 75 |

Collected from Excavations

| | |
|------------------------------|------|
| Plain - (thin) | - 54 |
| Smoothed-over cord - (thin) | - 6 |
| Cord Impressed - (thin) | - 6 |
| Simple Stamped - (thin) | - 20 |
| Cord Impressed - (thick) | - 2 |
| Smoothed-over cord - (thick) | - 3 |
| Incised on Cord | - 2 |
| Total | 93 |

Total Sherds from Surface and Excavations 168

Faunal Remains

The most predominant remains recovered from the site were in the form of bone fragments. Although the most represented species is bison, smaller elements suggest the presence of other mammals. The collection is presently undergoing analysis in the U.S.D. Archaeology Laboratory to determine numbers of species. The only other form of faunal remains recovered from the site were in the form of bird bone fragments and freshwater mussel shell fragments. However, no complete valves were encountered during excavation. Remains were recovered from the following excavation units.

| | Identifiable Bone | Bone Scraps | Shell Fragments |
|-------------------|----------------------|----------------|--------------------|
| East Area: | | | |
| Test 1 | + | + | 0 |
| Test 2 | + | + | + |
| Test 3 | 0 | 0 | 0 |
| ----- | | | |
| West Area: | | | |
| Trench | + | + | + |
| 2 millimeter Test | + | + | 0 |

CONCLUSIONS AND RECOMMENDATIONS

Although testing at the Gavins Point Site covered 21.52 meters, the artifact yield was minimal. For example, only a single projectile point and four retouched flakes were recovered, even though most of the units were excavated to more than 1 meter in depth. The eight auger holes placed on Gavins Point proper, although excavated to 1 meter below the surface, also failed to indicate cultural materials in quantity. The low yield suggests either that material is minimally concentrated or that sampling limitations are factors to be considered in making recommendations concerning the future of the site. Combined with the

results of Hall's (1961) tests at the Gavins Point Site, the results of the 1978 excavations indicate the limited usefulness of the site for contributing to our understanding of the prehistory of the area.

Findings of the 1978 archeological testing at the site are:

- 1) that cultural remains at the site are minimally concentrated and generally fail to occur in quantities which would be useful to increase our understanding of perhistory of the area.
- 2) that the location of only a single concentration of artifacts near the cut-bank and quantities of cultural remains presently deposited at the water's edge by wave action strongly suggests that the more productive parts of the site have been destroyed through removal by wave action. This activity is presently continuing; bank slumping, due to wave action, was noted while testing was in progress at the site. Local informants indicated to us that one part of the site, which had produced both historic and prehistoric artifacts in quantity, had been in the approximately 7 feet of bank that had been removed by wave action over the past 2 years.

There is little archeological evidence to warrant inclusion of the Gavins Point Site on the National Register of Historic Places at the present time. Therefore, planned construction at the site should be allowed to proceed, with the following stipulation. It is recommended that the U.S.D. Archaeology Laboratory or other qualified agency be notified 1 week in advance of the start of construction activities at the site and that a monitor from that institution be present at the site while activities involving removal or disturbance of the site fill are in progress. The purpose of the monitor is to guarantee that, should heretofore unknown and significant cultural resources be exposed during construction, they will be photographed, mapped, removed, and otherwise recorded with minimal delay to the construction schedule.

REFERENCES CITED

- Ahler, S.A.
1977 Lithic Resource Utilization Patterns in the Middle Missouri Subarea. Plains Anthropologist 78:132-150.
- Anderson, D.C., M. Finnegan, J. Hotopp, and A. Fisher
1977 Archaeology and Indian Religion: Precedents and Data from an Archaic Cemetery in Western Iowa. Research Papers 2 (3): 1-93. State Archaeologist of Iowa.
- Fenenga, F.
1953 Appraisal of the Archeological and Paleontological Resources of Gavin's Point Reservoir, Nebraska and South Dakota. MS on File, Midwest Archeological Center, Lincoln.
- Hall, R.L.
1961 An Archaeological Investigation in the Gavin's Point Area, Yankton County, South Dakota. Museum News, 22(7):1-3. W.H. Over Museum, Vermillion, SD.
- Howard, J.H. and R. Gant
1966 Report of the Archeological Salvage Investigations in the Gavin's Point Reservoir Area, Lewis and Clark Lake, Nebraska and South Dakota, 1963-1964. Archaeological Studies Circular #11, South Dakota Museum, Vermillion.
- Hurt, W.R.
1952 Report on the Investigation of the Scalp Creek Site, 39GR1, and the Ellis Creek Site, 39GR2, Gregory County, South Dakota, 1941, 1951. Archaeological Studies Circular #4. Pierre, SD.
- Ives, J.C.
1962 Mill Creek Pottery. Journal of The Iowa Archaeological Society, 11(3).
- Kivett, M.F.
1949 A Woodland Pottery Type from Nebraska. Proceedings of the 5th Plains Conference for Archaeology, Notebook 1, pp. 67-69.
1952 Woodland Site in Nebraska. Publications in Anthropology, No. 1. Nebraska State Historical Society, Lincoln.
- Rothrock, E.P.
1943 A Geology of South Dakota. State Geological Survey Bulletin 13, Vermillion, SD.
- Shutler, R., D.C. Anderson, et al.
1974 The Cherokee Sewer Site (13CK405): A Preliminary Report of a Stratified Paleo-Indian/Archaic Site in Northwest Iowa. Journal of the Iowa Archaeological Society 21.
- Sigstad, J.S. and J.K. Sigstad (eds.)
1973 Archaeological Field Notes of W.H. Over. Research Bulletin No. 1. South Dakota State Archaeologist.

Williams, P.M.

1975 The Williams Site (13PM50): A Great Oasis Component In Northwest Iowa.
Journal of the Iowa Archaeological Society 22:1-34.